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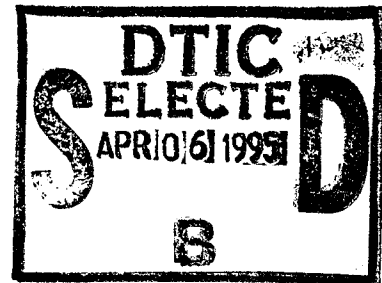
TITLE: SIXTH ANNUAL SYMPOSIUM ON SUBTYPES OF MUSCARINIC
RECEPTORS

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13. ABSTRACT (Maximum 200 words) <p>The Sixth Symposium on Subtypes of Muscarinic Receptors, held in Ft. Lauderdale, FL. from Nov.9-12, 1994 had 190 attendees, 87 of whom were from 16 countries outside the U.S.. Thirty-one major papers were presented, 3 by women scientists and 3 by the winners of the Otto Loewi New Investigator Awards. There were 97 posters presented in the 2 scheduled sessions but posters were accessible for the entire 3½ day meeting. Clinical data on Xanomeline, a new drug for the treatment of Alzheimer's disease was also presented. Funds granted by USAMRAA made it possible to publish quickly and disseminate widely the Symposium Proceedings. The edited manuscripts of the invited papers and the abstracts of poster papers were published Feb.10, 1995 as Vol.56, Nos.11/12 of <u>Life Sciences</u> and sent free to its thousands of subscribers and to hundreds of others. Grants from NSF and NIH supported the attendance of 29 pre- and postdoctoral fellows, 26 of whom presented posters. The choice of dates and venue for the Symposium also made it possible for many to attend The Society for Neuroscience meeting.</p> <p style="text-align: right;">DTIC QUALITY INSPECTED 8</p>				
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FINAL REPORT

The recently completed Sixth Symposium on Subtypes of Muscarinic Receptors was judged an outstanding success on the bases of: 1) the quality and timeliness of the invited scientific papers; 2) the large number of poster presentations; 3) the invited participation of women and minorities in the scientific sessions; 4) the large number of pre- and postdoctoral fellows whose attendance was made possible by funds granted to the Symposium, and 5) the establishment of the Otto Loewi New Investigator Awards and the excellent papers presented by the three awardees.

There were 190 attendees, 87 of whom were from 16 countries outside the United States (attendee names and addresses are attached). Thirty-one (31) major papers were presented, three of these by women scientists and three by the young scientists who won the Otto Loewi New Investigator Awards. A total of 97 poster papers were presented in the two afternoon sessions set aside for this (however, posters remained up for the entire 3 1/2 day meeting) and clinical data on Xanomeline, a new drug for the treatment of Alzheimer's disease, was also presented.

The Proceedings of the Sixth Symposium, which contains the edited manuscripts of the papers presented in the regular sessions as well as the abstracts of the poster papers has just been published--less than 3 months following the close of the Symposium.

The Proceedings appears as Vol.56, Nos 11/12, of the February 10, 1985

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1995 issue of Life Sciences and is sent free of charge to the thousands of subscribers of Life Sciences worldwide as well as to hundred of others. Grant support from the U.S. Army Research Aquisition Activity was largely responsible for the publication of the Proceedings and has been acknowledged in the program distributed to all registrants and in Life Sciences. We are extremely pleased that the grants we received and the funds contributed by 35 pharmaceutical companies made it possible for us to pay the travel and accommodation expenses of the 23 speakers and committee members from academia. The figure of which we are most proud, however, concerns the large number of pre-and postdoctoral students whom we were able to bring to the Symposium. There were 29 in all and 26 of these young investigators used this opportunity to present the results of their own research. The attendance of these young scientists was made possible and was largely supported by grants from the National Science Foundation, The National Institute of Neurological Disorders and Stroke, as well as by contributions from industry. As a direct result of these grants, 17 of the pre- and postdoctoral fellows were able also to attend the annual meeting of the Society for Neuroscience in Miami (our venue and dates were purposely chosen with this in mind). A list of the pre-and postdoctoral fellows and their affiliation is appended along with sample copies of the many letters received indicating the benefits derived from, and the overall success of, the Symposium.

Another measure of success of the Symposium was the high degree of active participation of the registrants in the formal sessions of the Symposium and their widespread interaction in

informal gatherings. The attendance at each of the five lecture sessions was excellent and appeared to include all registrants. The 10 minute period of discussion between papers was informative and provocative. The excellent lighting and space available for posters encouraged lengthy discussions by both presenters and viewers. There appeared to be much enthusiasm for the research being presented particularly by the young scientists. All in all, it is evident that the Sixth Symposium on Subtypes of Muscarinic Receptors has not only encouraged the research efforts of young investigators but has also stimulated and is stimulating additional research which should, indeed, lead to the development of new and better therapeutic agents as well as agents useful to the U.S. Army Research Aquisition Activity and to the U.S. Army Medical Research Institute Chemical Defense.

Plans for the Seventh Symposium on Subtypes of Muscarinic Receptors are already being made. The Seventh Symposium will be a satellite of the 1996 meeting of The Society for Neuroscience to be held November 16-21 in Washington, D.C.. The Symposium will directly precede the latter meeting and will be held either in Washington or Baltimore. We hope that USAMRAA will again help to support the publication of the Symposium's Proceedings.

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Fellows Supported by Grants.

Predoctoral Fellows

1. Cathryn M. Reeve
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Miami, Florida
2. Lise McKinnon
University of Washington
Dept. of Pharmacology
Seattle, Washington
3. Elizabeth Thomas
University of California
College of Medicine
Dept. of Pharmacology
Irvine, California
4. Diana Slowiejko
University of Michigan
Dept. of Pharmacology
Ann Arbor, Michigan
5. Melinda Shockley
University of California
Dept. of Pharmacy and Pharmaceutical Chemistry
San Francisco, California
6. Robin Pals-Rylaarsdam
Northwestern University
Chicago, Illinois
7. Maya Kunkel
Harvard University
Cambridge, Massachusetts
8. Shubhik DebBurman
Northwestern University
School of Medicine
Chicago, Illinois

Predoctoral Fellows (continued)

9. Lara Tolbert
University of California
School of Pharmacy
San Fransico, California
10. Ethan Burstein
University of Vermont
Dept. of Psychiatry
Burlington, Vermont
11. Brian Pike
Virginia Commonwealth University
Dept. of Psychology
Richmond, Virginia
12. Edward Gerstin, Jr.
University of California
Dept. of Pharmacology
Irvine, California
13. Nathalie Blin
NIH-NIDDK
Laboratory of Bioorganic Chemistry
Bethesda, Maryland
14. Albert Gadbut
Brigham and Women's Hospital
Cardiovascular Division
Boston, Massachusetts
15. Evette Esqueda
University of California
Dept. of Pharmacology
Irvine, California
16. Teresa Ramirez
University of California
Dept. of Pharmacology
La Jolla, California

Postdoctoral Fellows

1. Dr. Steven Hersh
Emory University
Dept of Neurology
Atlanta, Georgia
2. Dr. Anthony Morielli
Harvard University
Cambridge, Massachusetts
3. Dr. Tracy Spalding
University of Vermont
Dept. of Psychiatry
Burlington, Vermont
4. Dr. Ann Gnagey
University of Vermont
Dept. of Psychiatry
Burlington, Vermont
5. Dr. Louise Nuttle
University of Mississippi Medical Center
Dept. of Pharmacology and Toxicology
Jackson, Mississippi
6. Dr. Babatunde Ojo
University of Toledo
Dept. of Biological and Medicinal Chemistry
Toledo, Ohio
7. Dr. Paola Costa
University of Washington
Dept. of Environmental Health
Seattle, Washington
8. Dr. Nan-Xan Qian
National Jewish Center for Immunology-
and Respirator Medicine
Denver, Colorado

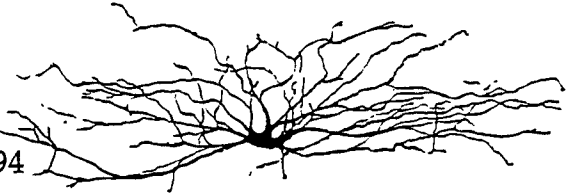
Otto Loewi; New Investigator Awardees

1. Dr. Jelweh Lamah
University of California
School of Pharmacy
San Francisco, California
2. Dr. Norman Lee
Institute for Genomic Research
Gaithersburg, Maryland



The University of Michigan
Neuroscience Laboratory Building

November 14, 1994



Dr. Ruth R. Levine
Boston University School of Medicine
80 East Concord Street
Boston, MA 02118

RE: 6th International Symposium on Subtypes of Muscarinic Receptors

Dear Ruth:

I wanted to write you a short note to express my appreciation for all your hard work and effort that went into organizing such a wonderful meeting. The location and food were superb, the sessions were scientifically stimulating and there was much opportunity for productive scientific interactions. I think that I can speak for many when I say this was one of the most scientifically rigorous and enjoyable meetings that I've attended in recent years.

I also wanted to especially thank you for providing the financial support that allowed my graduate student, Diana Slowiejko, to attend the meeting. In these fiscally inhospitable times with cuts in NIH funding of R01s, it is often difficult, if not impossible, to find the funds necessary to enable graduate students to attend meetings such as that focused on Muscarinic Receptor Subtypes. Yet I consider attendance at such meetings to be an essential part of a graduate student's training. Not only are students exposed to the most recent thinking, but they have the opportunity of meeting and speaking with internationally renowned individuals who previously were merely authors on well-thumbed papers! As a consequence, the possibility of a successful career in biomedical research becomes more real and enticing to them. I know that in Diana's case, she gained enormously from attendance at the Meeting and has returned brimming with new ideas and directions for her work. Thus, both of us are indebted to you for all of your efforts and kindness on our behalf. Once again, many thanks.

All best wishes,

Sincerely yours,

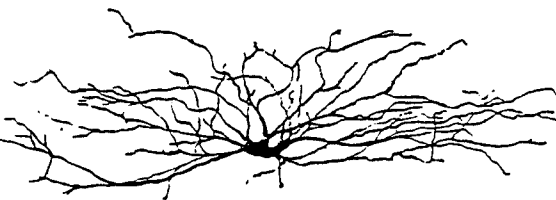
A handwritten signature in black ink that reads 'Steve'.

Stephen K. Fisher, Ph.D.
Associate Professor of Pharmacology

SKF:jk



The University of Michigan
Neuroscience Laboratory Building



December 6, 1994

Dr. Ruth Levine
Professor of Pharmacology
Associate Dean, Emeritus
Boston University School of Medicine
80 East Concord Street
Boston, MA 02118

Dear Dr. Levine:

Thank you very much for both an exciting and generous opportunity to attend the Sixth Symposium on Subtypes of Muscarinic Receptors this November. Both the scientific content and the personal interactions with other scientists was very rewarding and stimulating! Thank you again.

Sincerely yours,

Diana M. Slowiejko



DEPARTMENT OF PHARMACOLOGY
COLLEGE OF MEDICINE

IRVINE, CALIFORNIA 92717

November 19, 1994

Ruth R. Levine, Ph.D.
80 East Concord Street
Boston, MA 02118

Dear Dr. Levine,

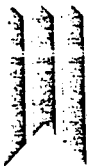
I just wanted to thank you and especially the NIH and NSF for the travel fellowship which allowed me to attend the recent Sixth Symposium on Subtypes of Muscarinic Receptors. The meeting was such a success! I really had a great experience talking with some of the most prominent researchers in the field, and finding out about the recent discoveries in the area of muscarinic subtypes. These symposia are very valuable learning experiences for pre- and post-doctoral students and fellows, and hopefully more will be able to attend the meeting in the future.

Thank you again.

Sincerely,

A handwritten signature in cursive script, appearing to read "Beth Thomas".

Elizabeth A. Thomas



Department of Molecular Pharmacology
and Biological Chemistry

303 East Chicago Avenue
Chicago, Illinois 60611-3008
(312) 503-0800
Fax (312) 503-5349

November 17, 1994

Dear Dr. Levine,

I am now back in the laboratory after attending the Symposium on Subtypes of Muscarinic Receptors, ready to work harder than ever, excited about the response to my work, and eager to see the "finished products" from other posters as they are published. This was the first major meeting I have attended, and I believe that it was the perfect meeting in which to start communicating my work. I especially enjoyed meeting and interacting with students from other laboratories, and the willingness of primary investigators to discuss my results and compare them with their own findings during poster sessions added to the education I received at this meeting. I have more confidence than ever that my advisor, Dr. Hosey, is asking good scientific questions and that my project is important to the field at large. I cannot fail to thank you again for the generous travel fellowship. It certainly made it much easier to attend and benefit from this Symposium. I would encourage you to have students help with registration again at the next Symposium; this was a great way to break away from our laboratory groups and get to know each other. It also helped me match names with faces from the start of the meeting. In short, I had a wonderful time attending the meetings and poster sessions. Thank you for your efforts in organizing the meeting and gathering financial support for other students and myself. I hope to see you in two years!

Sincerely,

Robin Pals-Rylaarsdam



DEPARTMENT OF PHARMACOLOGY
COLLEGE OF MEDICINE

IRVINE, CALIFORNIA 92717

November 21, 1994

Dr. Ruth Levine
Department of Pharmacology
Boston University School of Medicine
80 East Concord Street
Boston, MA 02118

Dear Dr. Levine,

I wanted to take the opportunity to congratulate you on your wonderful job in organizing the recent Sixth International Symposium on Subtypes of the Muscarinic Receptors. As a graduate student, I truly enjoyed meeting and interacting closely with scientists doing research in the muscarinic field, many of whom I've only encountered by reading journal articles. The opportunity to exchange ideas and gather information which will forward my own research was invaluable. Also, I want to thank you again for helping me attend the meeting. Without the travel funds you provided, my attendance would not have been possible, and I am thus quite grateful. I'm eagerly looking forward to seeing you at the Seventh International Symposium. Until then, I am

Respectfully yours,

A handwritten signature in black ink, appearing to read "Ed Gerstin". The signature is fluid and stylized, with a long horizontal stroke at the end.

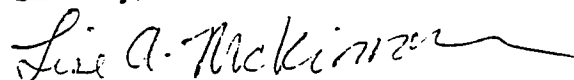
E. H. Gerstin, Jr.

November 16, 1994

Dear Dr. Levine,

I would like to extend my sincerest thanks for the student travel award to attend the Sixth International Symposium on Subtypes of Muscarinic Receptors. Attending the meeting afforded me the opportunity to present and discuss my data in a positive and interactive setting. The seminars were very enjoyable, particularly those given by the Otto Loewi New Investigator Award winners. Also, it was exciting to meet so many distinguished and well known scientists in the muscarinic receptor field. Participating in the meeting was a valuable educational experience for which I am most grateful. Again, thank you very much.

Sincerely,

A handwritten signature in cursive script that reads "Lise A. McKinnon". The signature is fluid and includes a long, sweeping horizontal line at the end.

Lise A. McKinnon
Dept. of Pharmacology
University of Washington



DEPARTMENT OF PHARMACOLOGY
COLLEGE OF MEDICINE

IRVINE, CALIFORNIA 92717

November 28, 1994

Ruth R. Levine, Ph.D.
Boston University School of Medicine
80 E. Concord St.
Boston, Mass. 02118

Dear Dr. Levine:

I would like to thank you for providing me with the opportunity to attend the Subtypes of Muscarinic Receptors Sixth International Symposium. As a graduate student, it is important to be able to interact with other scientists and receive input on poster presentations. However, this is the only meeting which offers such an abundance of information focused on what I am interested in the most, that being muscarinic receptors. I was very pleased to be able to hear the talks being presented by the leaders in the field and I was equally excited to be able to meet the authors of the papers which have provided the basis for much of our work. Unfortunately, this kind of setting is not available at any other meeting and so I would certainly hope that these meetings could continue. Thank you once again for making it all possible. I hope to be at the next meeting as well!

Sincerely,


Evette Esqueda



DEPARTMENT OF PHARMACOLOGY
SCHOOL OF MEDICINE

9500 GILMAN DRIVE
LA JOLLA, CALIFORNIA 92093-0636
FAX: (619) 534-6833

November 14, 1994

Ruth R. Levine, Ph.D.
Professor of Pharmacology
Boston University School of Medicine
at Boston University Medical Center
80 East Concord Street
Boston, MA 02118

Dear Ruth:

It was a real pleasure for me to be at the Muscarinic Receptor Subtypes meeting and to once again feel part of such a special group of scientists. You have performed a remarkable service by creating this unique community for the young and aging amongst us. And of course, the arrangements were as always superb. Thank you once again.

Fondly,

Joan Heller Brown, Ph.D.
Professor of Pharmacology

JHB/pk



DEPARTMENT OF PHARMACOLOGY
UCLA SCHOOL OF MEDICINE
CENTER FOR THE HEALTH SCIENCES
LOS ANGELES, CALIFORNIA 90024

November 27, 1994

Ruth R. Levine, Ph.D.
Professor of Pharmacology
University Professor
80 East Concord Street
Boston MA 02118

Dear Ruth,

Thank you very much for inviting me to participate in such a marvellous symposium, and for your very generous hospitality. You go from strength to strength, not only in the scientific force of the symposium but in the creature comforts that you arrange to provide. I am most grateful.

I have a manuscript partially prepared, but I was working under the assumption that before the final version was submitted I would be able to read the manuscripts. I would very much appreciate it if you could arrange to have them sent to me as soon as possible. I shall also need the typing mats from Life Sciences needed for the preparation of the final manuscript. Perhaps you could let me have the name and telephone number of the editor at Life Sciences who is supervising the production of this special issue.

Thank you again for a most stimulating intellectual experience and a thoroughly enjoyable personal one.

With best personal regards,

affectionately
Yours sincerely,

Donald J. Jenden
Professor of Pharmacology
and Biomathematics